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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,835	03/31/2001	Mingte Chen	M-11529 US	8525

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EXAMINER
ZHONG, CHAD

ART UNIT	PAPER NUMBER
2152	

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/823,835	CHEN ET AL.	
	Examiner	Art Unit	
	Chad Zhong	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *23-103* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *23-103* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

OFFICE ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/03/2005 has been entered.

Claims 23-103 are presented for examination; claims 23, 32, 37, 38, 42-46, 60, 65-69, 83-84, 87-91, and 96-97 are currently amended.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 23-103 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beck et al. (hereinafter Beck), US 6,332,154, in view of Aditya, US 6,718,393.

4. As per claim 23, Beck teaches an apparatus comprising:

a communication server (Fig 1, item 77, the CINOS manager running on server 77) for communicating with a communication channel, the communication server operable to:

handle an incoming communication received from the communication channel (Fig 2, item 83),

cause an outgoing communication to be sent to the communication channel (Col. 9, lines 35-40), wherein the communication server is further operable to communicate independently of a media type of

the communication channel (Fig 2; Col. 10, lines 5-10, CINOS operates in a media independent fashion) by virtue of being operable to use the channel driver (Col. 62, line 64 – Col. 63, line 5, where the appropriate driver for each type of offered media is installed as required).

Beck does not explicitly teach:

the receiving the incoming communication being performed via a channel driver communicatively coupled to the communication channel, wherein the channel driver is operable according to the media type of the communication channel;

In a similar system, Aditya teaches of a server side driver software performing load balancing operations on the incoming data packets. Specifically, Aditya teaches of receiving incoming data packets being performed via a channel driver communicatively coupled to a communication channel (Col. 4, lines 47-60; Fig 3, item 220 is the server, item 225 is the channel driver software), wherein the channel driver is operable according to the media type of the communication channel (Col. 6, lines 40-45, Fig 4, 5, wherein the packets are media type independent, the 'data' and 'type of data' fields define the media type; Col. 4, line 60 – Col. 5, line 7, where different types packet of media standards are defined by the packet fields, headers further help to identify the types of media data that is in the packets. The above section further provides support for multiple types of media packets i.e. "It is contemplated that the communication system may support data packets having other types of standard and secondary headers besides the IEEE 802.3 and IPX headers").

It would have been obvious for the person ordinary skilled in the art at the time of the invention to incorporate the teaching of Aditya with Beck because the combination would improve the functionality of Beck by having a channel driver operating on the server side and operating according to the media type of the communication channel in order to perform server side load balancing .

5. As per claim 24, Beck – Aditya disclose the invention substantially as rejected in claim 23 above, including the channel driver is further operable to:

provide an event when the incoming communication is received from the communication channel, (Beck, Col. 10, lines 35-62, wherein after the event is based upon the incoming request, proper agent is activated based upon the incoming request by the server); and

issue a command to the communication channel, wherein the command is the outgoing communication, the issuing being according to the media type of the communication channel (Beck, Col. 10, lines 35-62; wherein the server issues the command to the proper agent, the command can be in plurality of media forms not limited to email, fax or telephone call.); and

wherein the communication server being operable to handle the incoming communication further comprises the communication server being operable to obtain the event provided by the channel driver (Beck, Col. 10, lines 5-10, lines 30-35, lines 35-62; Col. 9, lines 59-65; Col. 10, lines 17-35 wherein the incoming request as well as out going command with respect to the server are media-type independent, which inherently means driver independent. Server in the current invention as well as Beck provides the intelligence to choose/route agents based on the media driver. Incoming requests are routed to proper agents in accordance with their respective media types/drivers through the communications channel);

Beck does not explicitly teach:

the communication server being operable to cause the outgoing communication to be sent further comprises the communication server being operable to cause the channel driver to issue the command

In a similar system, Aditya teaches of a server side driver software performing dynamic load balancing operations on the incoming data packets, Aditya further clarify dynamic as "a technique of re-assignment, adjustment or modification upon detecting a particular event", see Col. 3, lines 57-60. It should be further noted that the detection of event are events as specified by the data packets in the network.

Specifically, Aditya teaches of receiving incoming data packets being performed via a channel driver communicatively coupled to a communication channel (Col. 4, lines 47-60; Fig 3, item 220 is the server, item 225 is the channel driver software), wherein the channel driver is operable according to the media

type of the communication channel (Col. 6, lines 40-45, Fig 4, 5, wherein the packets are media type independent, the 'data' and 'type of data' fields define the media type).

It would have been obvious for the person ordinary skilled in the art at the time of the invention to incorporate the teaching of Aditya with Beck because the combination would improve the functionality of Beck by having a channel driver operating on the server side and operating according to the media type of the communication channel in order to perform server side load balancing .

6. As per claim 25, Beck – Aditya disclose the invention substantially as rejected in claim 24 above, including a user interface comprising a user interface object operable to be activated, wherein the communication server is operable to cause the channel driver to issue the command upon activation of the user interface object (Beck, Fig 5, wherein the customer interface is displayed, upon selection of icons in the interface appropriate action is to be taken by the appropriate drivers associated with the respective agents remotely).

7. As per claim 26, Beck – Aditya disclose the invention substantially as rejected in claim 25 above, including the communication server is further operable to receive the activation of the user interface object (Beck, Fig 2; Fig 5; wherein the icons located within fields 135, 137, 139 are customizable and user selectable).

8. As per claim 27, Beck – Aditya disclose the invention substantially as rejected in claim 25 above, including the communication server is further operable to provide a notification of the event via the user interface (Beck, Col. 10, lines 38-49; wherein the event notification is displayed through the agent graphical user interface, thus enabling the human operator to be notified of the event when the event arrives).

9. As per claim 28, Beck – Aditya disclose the invention substantially as rejected in claim 25 above,

including the communication server is further operable to:

determine an agent to be notified of the event (Beck, Col. 10, lines 40-50); and

provide a notification of the event to the agent via the user interface (Beck, Col. 10, lines 38-49).

10. As per claim 29, Beck – Aditya disclose the invention substantially as rejected in claim 25 above, including a connection between the user interface and the communication channel (Beck, Fig 2, see for example the link between 'customer a' and external media layer item#83).

11. As per claim 30, Beck – Aditya disclose the invention substantially as rejected in claim 29 above, including:

a first sub-connection between the user interface and the communication server (Beck, Fig 2, area between client and the external media layer, item # 83 for example);

a second sub-connection (Beck, Fig 2, workflow layer) between the communication server (Beck, Fig 2, item 89, item 85) and the channel driver (Beck, Fig 2, item 91; item 85); and

a third sub-connection (Beck, Fig 2, internal media layer) between the channel driver (Beck, Fig 2, item 85) and the communication channel; and

wherein the communication server is further operable to use the first and second sub-connections to cause the channel driver to issue the command (Beck, wherein the appropriate internal media layer or the driver is activated based on the incoming request); and

the channel driver is further operable to use the third sub-connection to issue the command (Beck, Fig 2).

12. As per claim 31, Beck – Aditya disclose the invention substantially as rejected in claim 25 above, including:

a database comprising:

an event table comprising information regarding the event (Beck, Fig 14);

a command table comprising information regarding the command (Beck, Col. 35, lines 27-43); and

a user interface object table comprising information regarding the user interface object (Beck, see for example, Col. 35, line 63 – Col. 36, line 9).

13. As per claim 32, Beck – Aditya disclose the invention substantially as rejected in claim 31 above, including:

wherein the communication server being operable to handle the event comprises further being operable to access the event table (Beck, Fig 14, Col. 35, lines 25-43; wherein the server keeps track of events in the event table); and

the communication server being operable to cause the channel driver to issue the command comprises being further operable to access the command table and the user interface object table to cause the channel driver to issue the command (Beck, Col. 35, lines 25-45; wherein command and user interface modules are activated in accordance with the next device to handle the command, for instance, if we determine the location to process the information such as the proper agent, command is given by the appropriate driver to access the correct agent, this process can be see for example Col. 38, lines 7-20, lines 31-41),

wherein command data in the command table and user interface object data in the user interface object table are used to cause the channel driver to issue the command (Beck, Col. 35, lines 25-45, Col. 35, line 63 – Col. 36, line 9; Col. 62, line 64 – Col. 63, line 5).

16. As per claim 33, Beck – Aditya disclose the invention substantially as rejected in claim 31 above, including the communication server is further operable to:

obtain the event provided by the channel driver (Beck, Fig 14; Col. 38, lines 7-20, lines 31-

41, wherein the server elects the appropriate remote contact based on drivers, said remote contact returns with its response); and

perform an event response (Beck, Col. 9, lines 35-40); and

the database further comprises:

an event response table comprising information regarding the event response to be performed upon obtaining the event (Beck, Fig 14, wherein the events get recorded within the table).

17. As per claim 34, Beck – Aditya disclose the invention substantially as rejected in claim 31 above, including the communication server is further operable to:

determine a configuration for an agent using the user interface (Beck, Col. 5, lines 25-35); and

wherein the database further comprises:

an agent configuration table comprising information regarding the configuration to which the agent belongs (Beck, see for example, Col. 55, lines 19-33).

18. As per claim 35, Beck – Aditya disclose the invention substantially as rejected in claim 34 above, including the database further comprises:

a configuration table comprising information regarding the configuration (Beck, Col. 55, lines 19-33); and

an agent table comprising information regarding the agent (Beck, Col. 55, lines 19-33).

19. As per claim 36, Beck – Aditya disclose the invention substantially as rejected in claim 24 above, including the communication channel is one communication channel of a plurality of communication channels (Fig 2, item 83, where the media layers provides multiple channels of communications between the client and the server);

the channel driver is one channel driver of a plurality of channel drivers (Beck, Col. 62, line 64 – Col. 63, line 5); and

each communication channel of the communication channels is associated with a corresponding channel driver of the channel drivers (Beck, Fig 2; Col. 62, line 64 – Col. 63, line 5).

20. As per claim 37, the claim is rejected for the same reasons as rejection to claim 23 above.

21. As per claim 38-40, claims 38-40 are rejected for the same reasons as rejection to claims 24, 28, 27 above respectively.

22. As per claim 41, claim 41 is rejected for the same reasons as rejection to combination of claims 27 and 30 above.

23. As per claim 98-99, instructions as well as data results produced by the system is inherently taught in Fig 2.

24. As per claim 42, Beck teaches a method for communicating using a communication channel comprising:

issuing a command to the communication channel, wherein the issuing the command is performed by a channel driver that communicates according to the media type (Col. 10, lines 15-35, wherein the command issued by the CINOS is media type specific; Col. 62, line 64 – Col. 63, line 5).

25. As per claim 43, claim 43 is rejected for the same reasons as rejection to combination of claims 32 and 23 above.

26. As per claims 100-101, claims 100-101 are rejected for the same reasons as rejection to claims 98-99 above respectively.

27. As per claim 44, Beck teaches a method comprising:

receiving an event from a communication channel, the receiving being performed by a channel

driver that communicates according to a media type of the communication channel (Beck, Col. 10, lines 15-36; Col. 62, line 64 – Col. 63, line 5);

accessing a database to determine an event response to the receiving the event (Beck, Col. 10, lines 30, database 79; Col. 10, lines 35-62), the access being performed by a communication server that is independent of the media type by virtue of being configured to use the channel driver to receive the event (Col. 62, line 64 – Col. 63, line 5; Fig 2, item 77); and

performing the event response, the performing being controlled by the communication server (Col. 9, lines 35-45; Col. 10, lines 1-10; Fig 2, item 77).

28. As per claim 102-103, claims 102-103 are rejected for the same reasons as rejection to claims 98-99 above respectively.

29. As per claim 45-52, claims 45-52 are rejected for the same reasons as rejection to claims 23-30 above respectively.

30. As per claim 53, Beck teaches the computer system of claim 52, wherein the first sub-connection comprises:

a web connection between the user interface and a web server; and

an inter-process connection between the web server and the communication server (Fig 2).

31. As per claims 54-59, claims 54-59 are rejected for the same reasons as rejection to claims 31-36 above respectively.

32. As per claims 60-63, claims 60-63 are rejected for the same reasons as rejection to claims 37, 24, 28, 27 above respectively.

33. As per claim 64, claim 64 is rejected for the same reasons as rejection to claims 27 and 30 above

respectively.

34. As per claim 65, claim 65 is rejected for the same reasons as rejection to claims 42 above.

35. As per claim 66, claim 66 is rejected for the same reasons as rejection to combination of claims 23 and 32 above.

36. As per claim 67, claim 67 is rejected for the same reasons as rejection to combination of claims 44, 27 and 28 above.

37. As per claims 68-82, claims 68-82 are rejected for the same reasons as rejection to claims 23-30, 53, 31-36 above respectively.

38. As per claims 83-90, claims 83-90 are rejected for the same reasons as rejection to claims 37-44 above respectively.

39. As per claims 91-95, claims 91-95 are rejected for the same reasons as rejection to claims 37-41 above respectively.

40. As per claim 96, claim 96 is rejected for the same reasons as rejection to combination of claims 42 and 43 above.

41. As per claim 97, claim 97 is rejected for the same reasons as rejection to claim 44 above.

Response to Arguments

42. In the remarks, applicant argued in substance that:

a) Beck does not teach "wherein the communication server is further operable to communicate independently of a media type of the communication channel".

b) Aditya reference does not teach all limitations of the claimed communication server and that load is likely to be balanced between communication channels that are of the same media type (capable of handling the same packet).

c) there lacks motivation to combine Beck and Aditya, Aditya would server only to complicate the system while providing no added functionality.

43. In response to applicant's arguments:

a) the communication is CINOS manager running on server 77 as disclosed in Fig 1, item 77 of Beck. Additionally, Fig. 2; Col. 10, lines 5-10 suggests CINOS operates in a media independent fashion. Further, in Col. 62, line 64 – Col. 63, line 5, Beck discusses appropriate driver for each type of offered media is installed as required.

b) Aditya teaches of a server side driver software performing load balancing operations on the incoming data packets. Specifically, Aditya teaches of receiving incoming data packets being performed via a channel driver communicatively coupled to a communication channel (Col. 4, lines 47-60; Fig 3, item 220 is the server, item 225 is the channel driver software), wherein the channel driver is operable according to the media type of the communication channel (Col. 6, lines 40-45, Fig 4, 5, wherein the packets are media type independent, the 'data' and 'type of data' fields define the media type; Col. 4, line 60 – Col. 5, line 7, where different types packet of media standards are defined by the packet fields, headers further help to identify the types of media data that is in the packets. The above section further provides support for multiple types of media packets i.e. "It is contemplated that the communication system may support data packets having other types of standard and secondary headers besides the IEEE 802.3 and IPX headers").

c) the examiner recognizes that obviousness can only be established by combining or modifying

the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious for the person ordinary skilled in the art at the time of the invention to have a channel driver operating on the server side and operating according to the media type of the communication channel in order to perform server side load balancing .

Conclusion

44. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents and publications are cited to further show the state of the art with respect to "Media Independent Communication Server".

i. US 6092102 Wagner

ii. US 6389132 Price

iii. US 6463292 Rahman

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Zhong whose telephone number is (571)272-3946. The examiner can normally be reached on M-F 7:15 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAROENCHONWANIT, BUNJOB can be reached on (571)272-3913. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CZ
December 22, 2005

BUNJOB JARDENCHONWANIT
SUPERVISORY PATENT EXAMINER